IN THE CLAIMS

Please cancel claims 49, 59-68 as follows.

1. (Previously presented) A compound of the formula of formula 1

$$R^{11}$$
 S
 X

or a pharmaceutically acceptable salt, or hydrate thereof,

X is CH;

Y is N;

R¹ is H or C₁-C₆ alkyl;

R² is a group of the formula

wherein X^2 is -S-, -N(R⁶)- or O, and X^3 , X^4 , X^5 , X^6 , and Z is N or CH, the dashed line in formula 2 represents an optional double bond, and the above R² groups of formulas 2, 4 and 6 are optionally substituted by 1 to 5 R⁵ substituents and the R² groups of formulas 3 and 5 are optionally substituted by 1 to 3 R⁵ substituents;

each R⁵ is independently selected from halo, cyano, trifluoromethoxy, trifluoromethyl, $-C(O)R^8$, $-NR^6C(O)R^7$, $-C(O)NR^6R^7$, $-NR^6R^7$, $-OR^9$, $-SO_2NR^6R^7$, $-SO_2R^6$, $-NR^6SO_2R^7$, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, $-(CH_2)_iO(CH_2)_oNR^6R^7$, $-(CH_2)_iO(CH_2)_oOR^9$, $-(CH_2)_iOR^9$, $-S(O)_i(C_1-C_6)_oOR^9$ alkyl), $-(CH_2)_t(C_6-C_{10} \text{ aryl})$, $-(CH_2)_t(5 \text{ to } 10 \text{ membered heterocyclic})$, $-(CH_2)_tO(CH_2)_q(5 \text{ to } 10 \text{ membered heterocyclic})$ membered heterocyclic), -C(O)(CH₂)₁(5 to 10 membered heterocyclic), -(CH₂)₁NR⁷(CH₂)₀NR⁶R⁷, $-(CH_2)_iNR^7CH_2C(O)NR^6R^7$, $-(CH_2)_iNR^7(CH_2)_aNR^9C(O)R^8$, $-(CH_2)_iNR^7(CH_2)_iO(CH_2)_oOR^9$, $-(CH_2)_iNR^7(CH_2)_0S(O)_i(C_1-C_6 \text{ alkyl}), -(CH_2)_iNR^7(CH_2)_iR^6, -SO_2(CH_2)_i(C_6-C_{10} \text{ aryl}), \text{ and } -SO_2(CH_2)_i(S_1-C_1)_0S(O)_i(C_1-C_2)_0S(O)_i(C_1-C_3)_0S(O)_i(C_1-C_4 \text{ alkyl}), -(CH_2)_iNR^7(CH_2)_0S(O)_i(C_3-C_4 \text{ alkyl}), -(CH_2)_iNR^7(C_4 \text{ a$ to 10 membered heterocyclic), wherein j is an integer from 0 to 2, t is an integer from 0 to 6, q is an integer from 2 to 6, the -(CH₂)₀- and -(CH₂)_t- moieties of the foregoing R⁵ groups optionally include a carbon-carbon double or triple bond where t is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing R⁵ groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R⁸, -NR⁶C(O)R⁷, -C(O)NR⁶R⁷, $-(CH_2)_1NR^6R^7$, $-SO_2R^6$, $-SO_2NR^6R^7$, C_1-C_6 alkyl, $-(CH_2)_1(5$ to 10 membered heterocyclic), -(CH₂)_tO(CH₂)_qOR⁹, and -(CH₂)_tOR⁹, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6;

each R^6 and R^7 is independently selected from H, C_1 - C_6 alkyl, -(CH_2)_t(C_6 - C_{10} aryl), -(CH_2)_t(5 to 10 membered heterocyclic), -(CH_2)_tO(CH_2)_qOR⁹, and -(CH_2)_tOR⁹, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing R^6 and R^7 groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, - $C(O)R^8$, - $NR^9C(O)R^{10}$, - $C(O)NR^9R^{10}$, - NR^9R^{10} , C_1 - C_6 alkyl, -(CH_2)_t(C_6 - C_{10} aryl), -(CH_2)_t(5 to 10 membered heterocyclic), -(CH_2)_tO(CH_2)_qOR⁹, and -(CH_2)_tOR⁹, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, with the proviso that where R^6 and R^7 are both attached to the same nitrogen, then R^6 and R^7 are not both bonded to the nitrogen directly through an oxygen;

each R^8 is independently selected from H, C_1 - C_{10} alkyl, -(CH₂)_t(C₆-C₁₀ aryl), and -(CH₂)_t(5 to 10 membered heterocyclic), wherein t is an integer from 0 to 6;

each R^9 and R^{10} is independently selected from H and $C_1\text{-}C_6$ alkyl; and

 R^{11} is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉ azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C₅-C₉ azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R⁵ substituents.

Claims 2-5 (Canceled)

- 6. (Previously presented) The compound of claim 1, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5 - C_9 azabicyclic, aziridinyl, or pyrrolidinyl ring wherein said C_5 - C_9 azabicyclic, aziridinyl, azetidinyl, or pyrrolidinyl ring are optionally substituted by 1 to 5 R^5 substituents.
- 7. (Original) The compound of claim 6, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5 - C_9 azabicyclic, azetidinyl or pyrrolidinyl ring wherein said C_5 - C_9 azabicyclic, azetidinyl or pyrrolidinyl ring is optionally substituted by 1 to 5 R^5 substituents.
- 8. (Original) The compound of claim 7, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5 - C_9 azabicyclic ring, wherein said C_5 - C_9 azabicyclic ring is optionally substituted by 1 to 5 R^5 substituents.
- 9. (Original) The compound of claim 7, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached to form an azetidinyl ring, wherein said azetidinyl ring is optionally substituted by 1 to 5 R^5 substituents.
- 10. (Original) The compound of claim 7, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached to form a pyrrolidinyl ring, wherein said pyrrolidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.

11. (Canceled)

- 12. (Previously presented) The compound of claim 1, wherein said R² group is a group of formula 2 or 6, wherein said formulas 2 and 6 are optionally substituted by 1 to 5 R⁵ substituents.
- 13. (Previously presented) The compound of claim 1, wherein said compound is selected from the group consisting of:

 Azetidin-1-yl-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

 [7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-pyrrolidin-1-yl-methanone;

7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid cyclohexyl-methyl-amide; (2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

- 7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid methyl-(2-morpholin-4-ylethyl)-amide;
- N-{1-[7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;
- N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;
- (3-Methylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
- (3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
- (6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
- (3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
- (2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
- (3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
- (2-Hydroxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
- (3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
- (3-Ethoxy-azetidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone; N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;
- cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-amide; pharmaceutically acceptable salts of said compounds; and solvates of said compounds.
- 14. (Previously presented) The compound of claim 13, wherein said compound is selected from the group consisting of
- (2S)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

'(+/-)-N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;

- (3S)-(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
- (+/-)-N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;
- (2R)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
- (3S)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
- (3R)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
- (+/-)-Cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-amide;
- 6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]methanone;
- (3S)-(3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone; pharmaceutically acceptable salts of said compounds; and solvates of said compounds.

Claims 15-28. (Canceled)

29. (Previously presented) A compound of claim 1, wherein R¹ is H; R² is

$$\begin{array}{c|c} X^2 & \text{or} & \\ \hline 2 & 6 \end{array}$$

 X^2 is -N(R⁶)-, the dashed line in formula 2 represents an optional double bond, Z is CH or N and the above R² group of formulas 2 and 6 are optionally substituted by 1 to 5 R⁵.

Claims 30-33. (Canceled)

34. (Previously presented) The compound of claim 29, wherein R^{11} is -C(O)NR¹²R¹³ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5 - C_9

azabicyclic, aziridinyl, azetidinyl, or pyrrolidinyl ring wherein said C_5 - C_9 azabicyclic, aziridinyl, azetidinyl, or pyrrolidinyl ring is optionally substituted by 1 to 5 R^5 substituents.

- 35. (Original) The compound of claim 34, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5 - C_9 azabicyclic, azetidinyl or pyrrolidinyl ring wherein said C_5 - C_9 azabicyclic, azetidinyl or pyrrolidinyl ring is optionally substituted by 1 to 5 R^5 substituents.
- 36. (Original) The compound of claim 35, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5 - C_9 azabicyclic ring wherein said C_5 - C_9 azabicyclic ring is optionally substituted by 1 to 5 R^5 substituents.
- 37. (Original) The compound of claim 36, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form an azetidinyl ring wherein said azetidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.
- 38. (Original) The compound of claim 37, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a pyrrolidinyl ring wherein said pyrrolidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.
 - 39. (Previously presented) A compound of claim 1, wherein R¹ is H; R² is

Claims 40-43. (Canceled)

44. (Previously presented) The compound of claim 39, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5 - C_9 azabicyclic, aziridinyl, azetidinyl, or pyrrolidinyl ring wherein said C_5 - C_9 azabicyclic, aziridinyl, azetidinyl, and pyrrolidinyl ring are optionally substituted by 1 to 5 R^5 substituents.

- 45. (Original) The compound of claim 44, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5 - C_9 azabicyclic, azetidinyl or pyrrolidinyl ring wherein said C_5 - C_9 azabicyclic, azetidinyl or pyrrolidinyl ring are optionally substituted by 1 to 5 R^5 substituents.
- 46. (Original) The compound of claim 45, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5 - C_9 azabicyclic ring, wherein said C_5 - C_9 azabicyclic ring is optionally substituted by 1 to 5 R^5 substituents.
- 47. (Original) The compound of claim 46, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form an azetidinyl ring, wherein said azetidinyl ring is optionally substituted by 1 to 5 R^5 substituents.
- 48. (Original) The compound of claim 47, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a pyrrolidinyl ring, wherein said pyrrolidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.

49. (Canceled)

Claims 50-58. (Canceled)

- 59. (Canceled)
- 60. (Canceled)
- 61. (Canceled)
- 62. (Canceled)
- 63. (Canceled)
- 64. (Canceled)
- 65. (Canceled)

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- 66. (Canceled)
- 67. (Canceled)
- 68. (Canceled)